

## Summary

### Summary of findings

#### SUMMARY OF FINDINGS

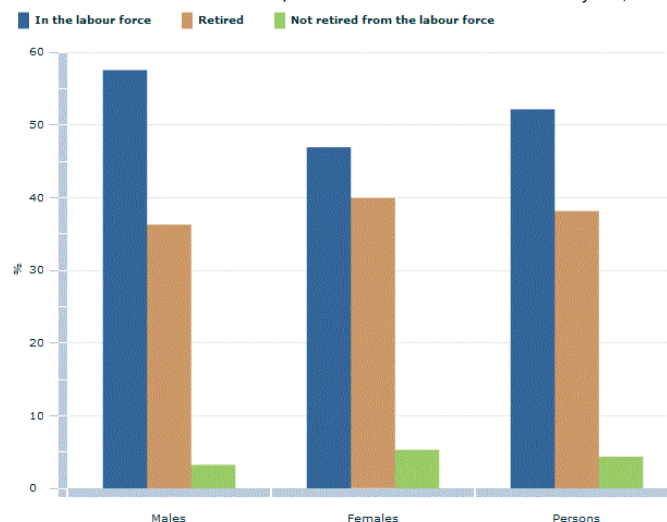
#### OVERVIEW

The 2016–17 Multipurpose Household Survey (MPHS) found that of the estimated 9.4 million persons aged 45 years and over who had, at some time, worked for two weeks or more, 4.9 million (52%) were in the labour force while 3.6 million (38%) had retired from the labour force (Table 1).

For those aged 45–49 years, just 5% were retired, compared with 64% of 65–69 year olds and 82% of those aged 70 years and over (Table 1).

In 2016–17, of men aged 45 years and over, 58% were in the labour force, 36% had retired, and 3% were not in the labour force but had not yet retired. In contrast, 47% of women aged 45 years and over were in the labour force, 40% had retired and 5% were not in the labour force but had not yet retired (Table 1).

**PERSONS AGED 45 YEARS AND OVER, Labour force and retirement status—By sex, 2016–17 (a)**



[Save Chart Image](#)

Australian Bureau of Statistics

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**Footnote(s):** (a) Excludes persons who had never worked for two weeks or more.

**Source(s):** Retirement and Retirement Intention, Australia, 2016-17

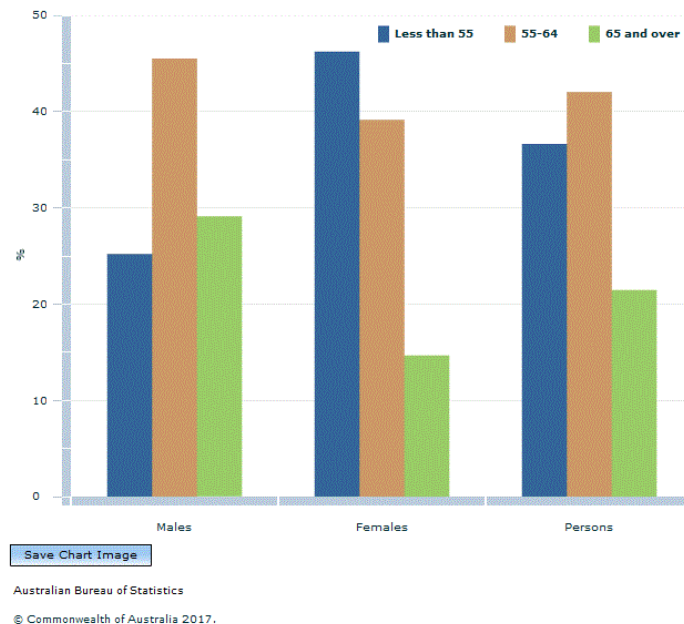
#### RETIRED FROM THE LABOUR FORCE

In 2016–17, there were 3.6 million persons, aged 45 years and over, who reported that they were retired from the labour force. This group comprised 1.7 million men and 1.9 million women. Just over half of all retired persons were aged 70 years and over (56% of retired men and 52% of retired women) (Table 1).

#### Age at retirement

It is important to note that data on retirement age presented in this summary only refer to 'surviving' retirees aged 45 years and over in 2016–17. Based on this, the distribution of retirement age in this population may not be representative of the age at which all persons retire. For example, based on Australian life expectancy, a person who retired aged 40 years in 1992 (aged 65 years in 2017) would more likely be alive to participate in this survey than a person who retired aged 65 years in 1992 (aged 90 years in 2017). This effect will be more pronounced for estimates presented in relation to persons who retired a long time ago, but will have some effect on all estimates, particularly as 30% of the retired population included in this summary retired more than 20 years ago. It should also be noted that persons living in non-private dwellings such as retirement homes are excluded from this survey. This may result in the average age at retirement data being lower than reality (Table 3).

**PERSONS RETIRED FROM THE LABOUR FORCE, Age at retirement (years) — By sex, 2016–17**



Source(s): Retirement and Retirement Intention, Australia, 2016-17

The average age at retirement from the labour force for persons aged 45 years and over in 2016–17 was 55.3 years (58.8 years for men and 52.3 years for women). Of the 1.7 million men who had retired from the labour force (Table 3):

- 25% had retired aged less than 55 years;
- 46% had retired aged 55–64 years; and
- 29% had retired aged 65 years and over.

The 1.9 million women who had retired from the labour force had retired on average at a younger age than men. The ages at which women retirees had retired from the labour force were as follows (Table 3):

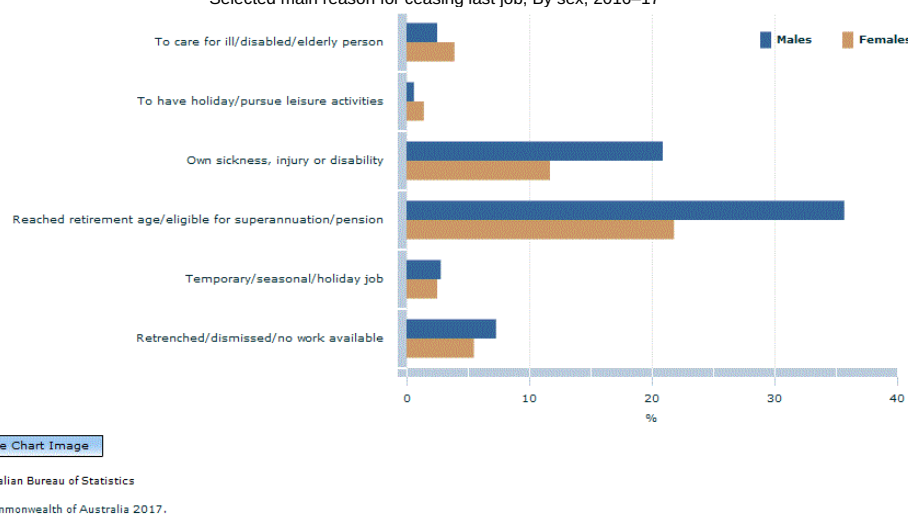
- 46% had retired aged less than 55 years;
- 39% had retired aged 55–64 years; and
- 15% had retired aged 65 years and over.

The average age at retirement for recent retirees (those who have retired in the last five years) was 62.9 years. Within this group, there was a difference between the retirement age of men and women, with women retiring a little younger than men (the average retirement ages for this group were 63.6 years for men and 62.1 years for women) (Table 3).

#### Reasons for ceasing last job

Among both retired men and women whose last job was less than 20 years ago, a commonly reported main reason for ceasing their last job was 'reached retirement age/eligible for superannuation/pension' (36% of men and 22% of women). These persons had average retirement ages of 63.5 years (64.1 years for men and 62.7 years for women). Other commonly reported main reasons given by persons for ceasing their last job were 'own sickness, injury or disability' (21% of men and 12% of women) and 'retrenched/dismissed/no work available' (7% of men and 5% of women) (Table 5).

**PERSONS AGED 45 YEARS AND OVER WHO HAVE RETIRED FROM THE LABOUR FORCE,**  
Selected main reason for ceasing last job, By sex, 2016–17

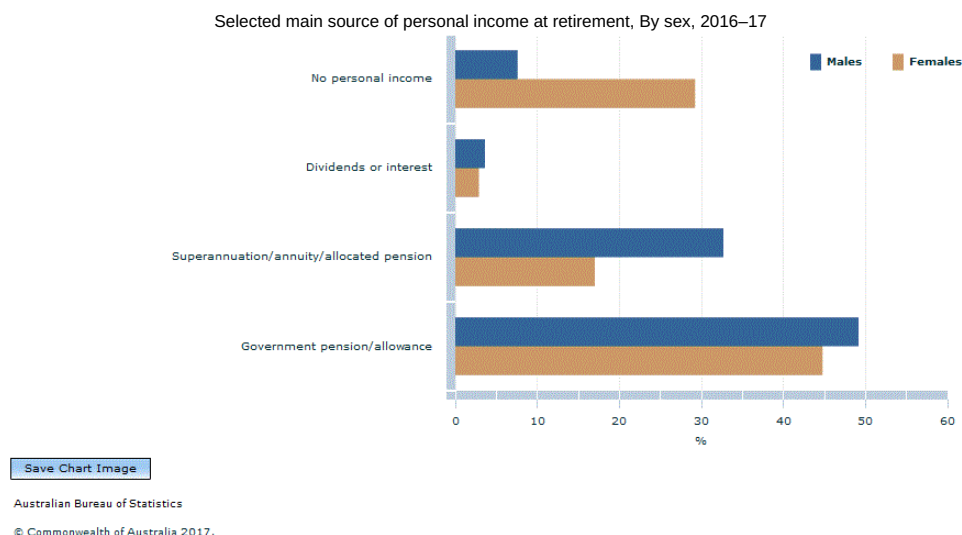


Source(s): Retirement and Retirement Intention, Australia, 2016-17

#### Sources of income during retirement

For men who have retired, commonly reported main sources of personal income were 'government pension/allowance' (49%) and 'superannuation/annuity/allocated pension' (33%). For women who have retired, commonly reported main sources of personal income were also 'government pension/allowance' (45%) and 'superannuation/annuity/allocated pension' (17%). For persons who have retired, just under half (37%) of women reported 'partner's income' as their main source of funds for meeting living costs compared to 9% of men (Table 6).

**PERSONS AGED 45 YEARS AND OVER WHO HAVE RETIRED FROM THE LABOUR FORCE,**



Source(s): Retirement and Retirement Intention, Australia, 2016-17

### Superannuation scheme membership

Of the 3.6 million persons aged 45 years or over who were retired from the labour force, 2.3 million (65%) had made contributions to a superannuation scheme. Men were more likely to have made contributions to a superannuation scheme than women. Just under three quarters (74%) of retired men aged 45 years and over had contributed compared to 58% of women (Table 8).

Of those who had made contributions, 52% had received all or part of their superannuation funds as a lump sum payment. Many of those who received a lump sum payment used it to pay off or improve their existing home or purchase a new home (36% of men and 32% of women) or to reinvested their lump sum payment into a bank account, personal savings or other investment (21% of men and 19% of women). Some cleared other outstanding debt (19% of men and 17% of women) or invested in an approved deposit fund, deferred annuity or other superannuation scheme (18% of men and 13% of women) (Table 8).

Of the 2.3 million retired persons aged 45 years and over who had contributed to a superannuation scheme, men were more likely to have contributed for a longer period of time than women. Just over half of the men in this group (59%) had contributed for 20 years or more, compared with 38% of women in the same group (Table 8).

### PREVIOUSLY RETIRED

There were 177,500 persons aged 45 years and over who had previously retired from the labour force but at the time of the survey were either in the labour force or were planning to look for, or take up, work in the future. Most of this group were women (108,200), and most of these women were in the labour force at the time of survey (93,800) (Table 12).

Commonly reported reasons for returning to the labour force were 'financial need' (42%) and 'bored/needed something to do' (32%) (Table 12).

### INTENTIONS TO RETIRE FROM THE LABOUR FORCE

Of the 4.9 million persons in the labour force aged 45 years and over, 3.9 million (79%) indicated that they intended to retire from the labour force in the future.

For employed persons who intended to retire from the labour force, 69% worked full-time. Of full-time workers, 34% intended to move into part-time work before retiring from the labour force, and 32% intended to continue with full-time work until retiring from the labour force (Table 1).

### Plans to phase in retirement

Of the 949,300 persons who intended to continue with full-time work until retirement, 65% intended to remain with their current employer and had no further plans to phase in retirement. A further 17% intended to remain with their current employer but with less demanding duties. Of those who planned to work full-time until retirement, only 8% intended to change their employer before retiring (Table 11).

Of those intending to retire, approximately 37% of persons intended to leave full-time work and take up part-time work before retirement. Of these, 67% planned to continue on with their current employer, 20% intended to change their employer and the remainder did not know whether they would change employers. Of those intending to work part-time and change their employer, 45% planned to change to a different line of work, 25% planned to work on a contract basis and 21% intended to work more hours from home (Table 11).

### Age intends to retire

Of the 3.9 million persons in the labour force who indicated that they intended to retire from the labour force, 1.6 million persons (40%) did not know the age at which they would retire (36% of men and 44% of women). Of those who did indicate an age (Table 9):

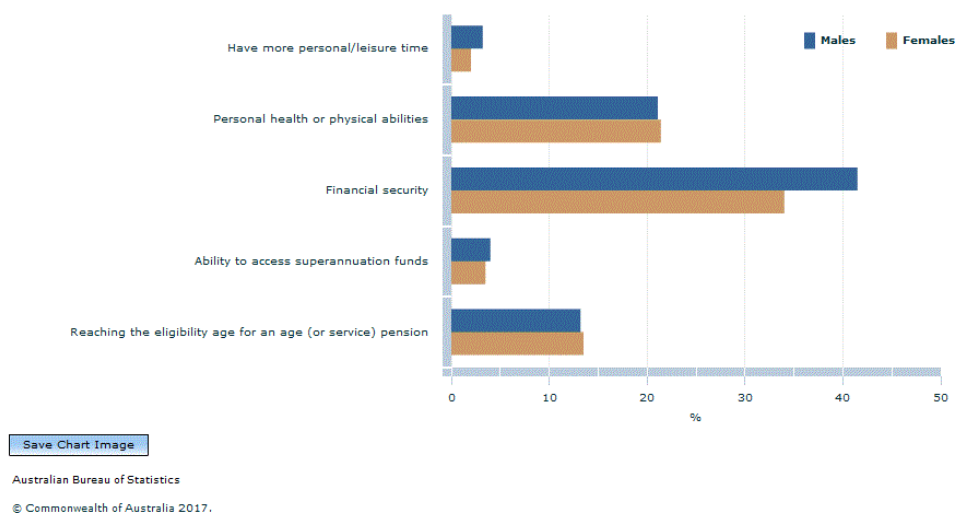
- 20% intended to retire 70 years and older (22% of men and 18% of women);
- 50% intended to retire between 65 and 69 years (53% of men and 47% of women);
- 23% intended to retire between 60 and 64 years (19% of men and 27% of women); and
- 7% intended to retire between 45 and 59 years (6% of men and 8% of women).

The average age at which persons intended to retire was 65 years (65.5 years for men and 64.4 years for women) (Table 9).

### Main factor influencing decision about when to retire

For those in the labour force who intended to retire, the most common main factors influencing their decision about when they would retire were 'financial security' (41% of men and 34% of women), 'personal health or physical abilities' (21% for both men and women), and 'reaching the eligibility age for an age (or service) pension' (13% for both men and women) (Table 9).

### PERSONS AGED 45 YEARS AND OVER WHO INTENDED TO RETIRE FROM THE LABOUR FORCE, Selected main factor influencing decision about when to retire, By sex, 2016–17



Source(s): Retirement and Retirement Intention, Australia, 2016-17

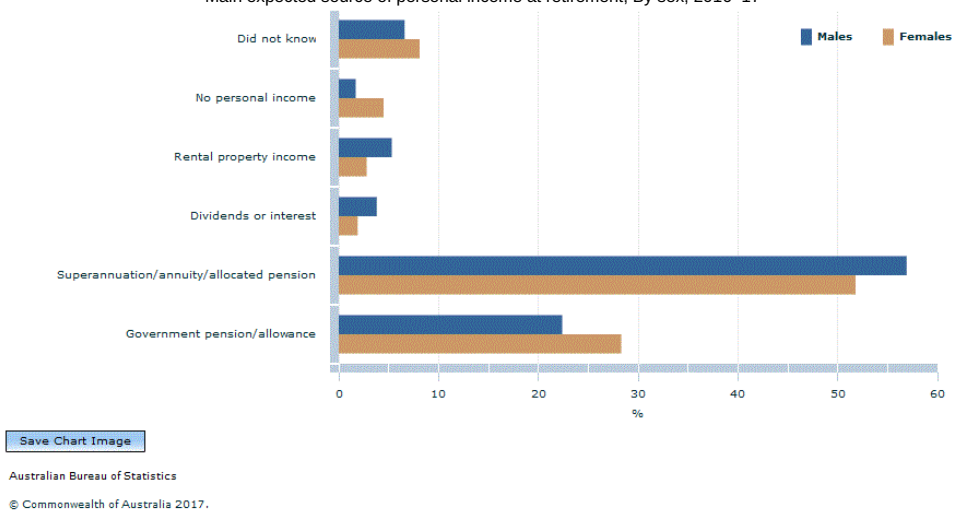
### Main expected source of income at retirement

Just over half (54%) of the 3.9 million persons aged 45 years and over who indicated that they intended to retire from the labour force, reported their main expected source of personal income at retirement as 'superannuation/annuity/allocated pension'. More than half of men who intended to retire reported this (57%), and 52% of women. Approximately 94% of persons intending to retire indicated that they had contributed to a superannuation scheme at some time, compared with 65% of persons who had already retired (Tables 8 and 10).

Another commonly reported main expected source of personal income was a 'government pension/allowance' (25%), and this was reported by 22% of men intending to retire and 28% of women (Table 10).

The main expected source of funds for meeting living costs at retirement varied between men and women. Although personal income was a common expected source for both men (79%) and women (70%), 11% of women expected to rely on 'partner's income' in contrast to only 2% of men (Table 10).

### PERSONS AGED 45 YEARS AND OVER WHO INTENDED TO RETIRE FROM THE LABOUR FORCE, Main expected source of personal income at retirement, By sex, 2016-17



Footnote(s): (a) Includes persons who expected to live off savings, assets, partner's income etc

Source(s): Retirement and Retirement Intention, Australia, 2016-17

There were some differences reported by those who had already retired compared with those who intended to retire regarding their main (expected) source of personal income at retirement. While 47% of persons aged 45 years and over who had retired reported a 'government pension or allowance' as their main source of income at retirement, only 25% of persons aged 45 years and over who were intending to retire indicated that this would be their main expected source of income at retirement.

Although 'superannuation/annuity/allocated pension' was reported as their main source of income at retirement by just 24% of retirees, just over half of those who intended to retire (54%) expected that this would be their main source of income at retirement (Tables 7 and 10).

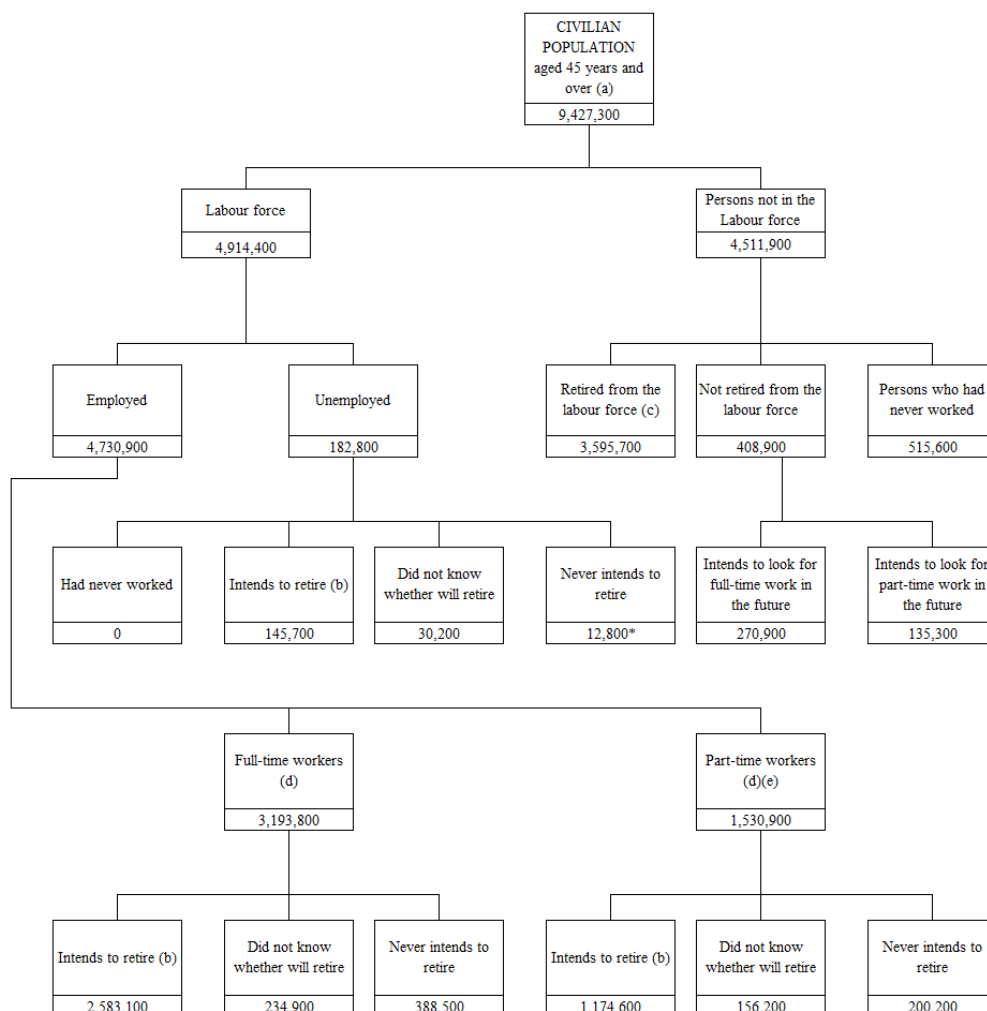
Similar differences emerged for main (expected) source of funds for meeting living costs at retirement. While only 6% of those intending to retire expected to rely on 'partner's income', this was reported as the main source of funds for meeting living costs by 24% of retirees (Tables 7 and 10).

## Conceptual Framework

### OVERVIEW

The following diagram illustrates the framework for statistics from the Multipurpose Household Survey Retirement and Retirement Intentions topic. This presents information about the retirement status and retirement intentions of persons aged 45 years and over who have, at some time, worked for two weeks or more.

The survey found that of the estimated 9.4 million persons aged 45 years and over who had, at some time, worked for two weeks or more, 4.9 million were in the labour force and 3.6 million had retired from the labour force. Of the 4.9 million persons in the labour force aged 45 years and over, 3.9 million indicated that they intended to retire from the labour force in the future.



Cells in this table have been randomly adjusted to avoid the release of confidential data. Discrepancies may occur between sums of the component items and totals.

\* estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) For exclusions see paragraph 7 of the Explanatory Notes.

(b) 'Intends to retire' is defined as intention to give up all labour force activity, that is working or looking for work.

(c) 'Retired from the labour force' includes persons who have previously worked two weeks or more and had retired from work or looking for work, and did not intend to look for work, or take up, working in the future.

(d) Based on hours usually worked per week in all jobs.

(e) Includes persons who usually work zero hours, but worked during the reference week.

## Main Features

### ABOUT THIS PUBLICATION

This publication presents information about the retirement status and retirement intentions of persons aged 45 years and over who have, at some time, worked for two weeks or more. The data collected in the Retirement and Retirement Intentions survey provides information on retirement trends, the factors which influence decisions to retire, and the income arrangements that retirees and potential retirees have made to provide for their retirement. The data are cross-classified by a range of demographic characteristics such as age and sex, as well as labour force characteristics.

The statistics in this publication were compiled from the Multipurpose Household Survey (MPHS), conducted throughout Australia during the 2016–17 financial year, as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS).

Information on the other surveys collected in the 2016–17 MPHS can be found in paragraph 1 of the Explanatory Notes.

### CHANGES IN THIS ISSUE

For the 2012–13 survey, questions were included on Housing tenure, Previous full-time job details and Main source of current personal income. These were excluded from the 2014–15 survey.

For the 2014–15 survey, changes were also made to include the further age ranges of '65 - 69', '70 - 74', '75 - 79' and '80 and over' for questions on transitioning to retirement.

For the 2016–17 survey, enhancements were made to Previous job module, a new question asking "Did you have employees in the business" was added. Questions were also included on Housing tenure.

### NOTES ABOUT THE ESTIMATES

The MPHS was designed primarily to provide estimates at the Australia level. Broad estimates are also available for states and territories, although users should exercise caution when using estimates at this level, because of the presence of high sampling errors. For further information about the reliability of the estimates see paragraph 13 of the Explanatory Notes.

## About this Release

This publication presents information on retirement for people aged 45 years and over. For those who are still in the labour force, information is available about current job and retirement intentions. For those not in the labour force and have retired, data items include: age at retirement; reason retired; income sources in retirement, and use of any lump sum payments.

## History of changes

07/05/2020

- Table 7 updated: The data relating to the sources of income "Workers' Compensation" and "Dividends or Interest" were originally published in the wrong rows. These have been corrected in the current version.

20/12/2017

- The 'Persons aged 45 years and over who have retired from the labour force, selected main source of personal income at retirement, by sex, 2016-17' graph has been updated to correct data for the percentage for females in the 'Superannuation/annuity/allocated pension' category.
- The 'Persons retired from the labour force, age at retirement (year) - by sex, 2016-17' graph has been updated to make a correction to the graph labels and legend.
- The 'Persons aged 45 years and over who intended to retire from the labour force, selected main factor influencing decision about when to retire, by sex, 2016-17' graph has been updated to fix a discrepancy between the graph data and the summary of findings.

## Explanatory Notes

### Explanatory Notes

#### EXPLANATORY NOTES

##### INTRODUCTION

1 This publication contains results from the Retirement and Retirement Intentions Survey, a topic on the Multipurpose Household Survey (MPHS) conducted throughout Australia from July 2016 to June 2017. The MPHS is conducted by the Australian Bureau of Statistics (ABS) as a supplement to the monthly Labour Force Survey (LFS), and is designed to collect statistics for a number of small, self-contained topics. The topics collected in 2016–17 were:

- Crime Victimisation, Australia (cat. no. 4530.0)
- Patient Experiences in Australia: Summary of Findings (cat. no. 4839.0)
- Retirement and Retirement Intentions, Australia (cat. no. 6238.0)
- Barriers and Incentives to Labour Force Participation, Australia (cat. no. 6239.0)
- Household Use of Information Technology, Australia (cat. no. 8146.0)
- Work Related Injuries, Australia (cat. no. 6324.0)

2 For all topics, information on labour force characteristics, education, income and other demographics are available.

3 The publication Labour Force, Australia (cat. no. 6202.0) contains information about survey design, sample redesign, scope, coverage and population benchmarks relevant to the monthly LFS, which also apply to the MPHS. It also contains definitions of demographic and labour force characteristics, and information about the modes of data collection, which are relevant to both the monthly LFS and the MPHS.

##### CONCEPTS SOURCES AND METHODS

4 The conceptual framework used in Australia's LFS aligns closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts and structure of Australia's labour force statistics, and the sources and methods used in compiling these estimates, are presented in Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001).

##### COLLECTION METHODOLOGY

5 ABS interviewers conducted personal interviews by either telephone or in person at selected households during the 2016–17 financial year. Each month a sample of households were selected for the MPHS from the responding households in the LFS. In these households, after the LFS had been fully completed for each person, a usual resident aged 15 years and over was selected at random and asked the additional MPHS questions in a personal interview. Information was collected using Computer Assisted Interviewing (CAI), whereby responses are recorded directly onto an electronic questionnaire in a notebook computer.

##### SCOPE

6 The scope of the LFS is restricted to persons aged 15 years and over and excludes the following:

- members of the permanent defence forces;
- certain diplomatic personnel of overseas governments, customarily excluded from census and estimated population counts;
- members of non-Australian defence forces (and their dependants); and
- overseas residents in Australia.

7 In addition the 2016–17 MPHS excluded the following:

- persons living in Indigenous communities in very remote parts of Australia; and
- persons living in non-private households such as hotels, university residences, students at boarding schools, patients in hospitals, inmates of prisons and residents of other institutions (e.g. retirement homes, homes for persons with disabilities).

8 For the Retirement and Retirement Intentions topic, the scope was further restricted to persons aged 45 years and over.

##### COVERAGE

9 In the LFS, coverage rules are applied which aim to ensure that each person is associated with only one household and hence has only one chance of selection in the survey. See the Explanatory Notes of Labour Force, Australia (cat. no. 6202.0) for more details.

##### SAMPLE SIZE

10 The initial sample for the MPHS 2016–17 consisted of approximately 26,000 private households. Of the 15,400 private households that remained in the survey after sample loss (e.g. households with LFS non-response, no residents in scope for the LFS, vacant or derelict dwellings and dwellings under construction), approximately 72% fully responded to the MPHS. The number of completed interviews obtained from these private households (after taking into account scope, coverage and subsampling exclusions) was 8,200 for the Retirement and Retirement Intentions survey.

##### WEIGHTING, BENCHMARKING AND ESTIMATION

11 Weighting is the process of adjusting results from a sample survey to infer results for the total in-scope population. To do this, a 'weight' is allocated to each sample unit. For the data in this release the sample unit is a person. The weight is a value which indicates how many population units are represented by the sample unit. The first step in calculating weights for each unit is to assign an initial weight, which is the inverse of the probability of being selected in the survey. The initial weights are then calibrated to align with independent estimates of the population of interest, referred to as 'benchmarks'. Weights are calibrated against population benchmarks to ensure that the survey estimates conform to the independently estimated distribution of the population rather than the distribution within the sample itself.

12 The survey was benchmarked to the Estimated Resident Population (ERP) in each state and territory at December 2016. Previously, March was used as the reference month for benchmarking. This is the first year that the reference month has been changed to December. This aligns MPHS with the weighting methodology generally adopted by other social surveys, whereby the middle month of the enumeration period is selected as the benchmark reference month. This will have a minor affect on the comparison

of level estimates as there has only been 21 months of population growth accounted for between the 2014-15 publication (based on March 2015 benchmarks) and the 2016-17 publication (based on December 2016 benchmarks). There will be no effect on the analysis proportions.

## RELIABILITY OF THE ESTIMATES

**13** Estimates in this publication are subject to sampling and non-sampling errors:

- Sampling errors are the difference between the published estimate and the value that would have been produced if all households had been included in the survey. For more information see the Technical Note; and
- Non-sampling errors are inaccuracies that occur because of, for example, imperfections in reporting by respondents and interviewers and errors made in coding and processing data. These inaccuracies may occur in any enumeration, whether it be a full count or a sample. Every effort is made to minimise non-sampling error by careful design of questionnaires, intensive training and supervision of interviewers and effective processing procedures.

## CLASSIFICATIONS USED

**14** Country of birth data are classified according to the Standard Australian Classification of Countries (SACC), 2011 (cat. no. 1269.0).

**15** Occupation data are classified according to the ANZSCO – Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2 (cat. no. 1220.0).

**16** Industry data are classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0) (cat. no. 1292.0)

## NOTES ON ESTIMATES

**17** To minimise the risk of identifying individuals in aggregate statistics, a technique is used to randomly adjust cell values. This technique is called perturbation. Perturbation involves small random adjustment of the statistics and is considered the most satisfactory technique for avoiding the release of information that could identify individual survey respondents while maximising the range of information that can be released. These adjustments have a negligible impact on the underlying pattern of the statistics. After perturbation, a given published cell will be consistent across all tables. However, adding up cell values to derive a total will not necessarily give the same result as published totals.

## COMPARABILITY WITH MONTHLY LFS STATISTICS

**18** Due to differences in the scope and sample size of the MPHS and that of LFS, the estimation procedure may lead to some variations between labour force estimates from this survey and those from LFS.

## PREVIOUS SURVEYS

**19** The Retirement and Retirement Intentions survey was last conducted in the 2014–15 financial year. Results of this survey were published in:

- Retirement and Retirement Intentions, Australia, July 2014 to June 2015 (cat. no. 6238.0).

## CHANGES IN THIS ISSUE

**20** For the 2012–13 survey, questions were included on Housing tenure, Previous full-time job details and Main source of current personal income. These were excluded from the 2014–15 survey.

**21** For the 2014–15 survey, changes were also made to include the further age ranges of '65 - 69', '70 - 74', '75 - 79' and '80 and over' for questions on transitioning to retirement.

**22** For the 2016–17 survey, enhancements were made to Previous job module, a new question asking "Did you have employees in the business" was added. Questions were also included on Housing tenure.

**23** For a more detailed list of available data items and their categories – Barriers & Incentives to Labour Force Participation and Retirement & Retirement Intentions 2016–17 Data Items List, is available in an excel spreadsheet, on the ABS Website under the Downloads section.

## NEXT SURVEY

**24** The ABS plans to conduct this survey again during the 2018–19 financial year.

## ACKNOWLEDGEMENT

**25** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the Census and Statistics Act, 1905.

## RELATED PUBLICATIONS

**26** ABS publications which may also be of interest include:

- Labour Force, Australia (cat. no. 6202.0);
- Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001)
- Labour Force Survey Standard Products and Data Item Guide (cat. no. 6103.0)
- Persons Not in the Labour Force, Australia (cat. no. 6220.0)

# Glossary

## GLOSSARY

### Employed

Persons who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
  - away from work for less than four weeks up to the end of the reference week; or
  - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
  - away from work as a standard work or shift arrangement; or
  - on strike or locked out; or
  - on workers' compensation and expected to return to their job; or
- were employers or own account workers who had a job, business or farm, but were not at work.

### Employees

Persons who work for a public or private employer and receive remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips, piece rates, or payment in kind, or persons who operate their own incorporated enterprise with or without hiring employees.

**Employees with paid leave entitlements**

Employees who were entitled to either paid sick leave or paid holiday leave (or both).

**Employees without paid leave entitlements**

Employees who were not entitled to, or did not know whether they were entitled to, paid sick and paid holiday leave.

**Full-time workers (usual)**

Employed persons who usually work 35 hours or more a week in all jobs.

**Fully self funded**

Funded entirely from superannuation or any other income source, excluding any form of a government pension and/or allowance.

**Government pension/allowance**

Income support payments from government to persons under social security and related government programs. Included are pensions and allowances received by aged, disabled, unemployed and sick persons, families and children, veterans and their survivors, and study allowances for students. Payments made by overseas governments as well as the Australian government are included.

**Industry**

An industry relates to a group of businesses or organisations that perform similar sets of activities in terms of the production of goods and services. In this publication, industry is classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0) (cat. no. 1292.0)

**Intends to retire from the labour force**

Those persons who indicated that they intended to give up all labour force activity: working or looking for work.

**Labour force**

The civilian population can be split into two mutually exclusive groups: the labour force (employed and unemployed persons) and not in the labour force.

**Last job**

Refers to last job less than 20 years ago.

**Main job**

The job in which most hours were usually worked.

**Not employed**

Persons who are either unemployed or not in the labour force.

**Not retired from the labour force**

Persons aged 45 years and over who have, at some time, worked for two weeks or more and were not retired from the labour force. That is, either employed, unemployed or not in the labour force and intend to look for, or take up, work in the future.

**Occupation**

An occupation relates to a collection of jobs that are sufficiently similar in their title and tasks, skill level and skill specialisation which are grouped together for the purposes of classification. In this publication, occupation is classified according to ANZSCO – Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2 (cat. no. 1220.0).

**Owner managers of incorporated enterprises (OMIEs)**

Persons who work in their own incorporated enterprise, that is, a business entity which is registered as a separate legal entity to its members or owners (may also be known as a limited liability company).

An owner manager of an incorporated enterprise may or may not hire one or more employees in addition to themselves and/or other owners of that business. See Status in employment for more information.

**Owner managers of unincorporated enterprises (OMUEs)**

A person who operates his or her own unincorporated enterprise or engages independently in a profession or trade.

An owner manager of an unincorporated enterprise may or may not hire one or more employees in addition to themselves and/or other owners of that business. See Status in employment for more information.

**Partially self funded**

Funded by government pension and/or allowance and at least one other income source.

**Part-time workers (usual)**

Employed persons who usually work less than 35 hours a week (in all jobs).

**Persons in the labour force**

Persons who were classified as being in the labour force, that is, either employed or unemployed.

**Persons not in the labour force**

Persons who were not classified as employed or unemployed.

**Private health insurance**

Includes hospital and/or extras cover only. Persons who reported ambulance cover only, or other health arrangements (eg DVA) are not considered to have private health insurance.

**Relationship in household**

The relationship of persons who live in the same household.

**Retired from the labour force**

Persons who had previously worked for two weeks or more and had retired from work or looking for work, and did not intend to look for, or take up, work in the future.

## Status of employment

Status of employment is determined by an employed person's position in relation to their job, and is usually in respect of a person's main job if they hold more than one job.

Employed persons are classified according to the reported relationship between the person and the enterprise for which they work, together with the legal status of the enterprise where this can be established. The groups include:

- Employees
- Owner manager of incorporated enterprise (OMIEs) with employees;
- Owner manager of incorporated enterprise (OMIEs) without employees;
- Owner manager of unincorporated enterprise (OMUEs) with employees;
- Owner manager of unincorporated enterprise (OMUEs) without employees; and
- Contributing family workers.

## Superannuation scheme

Any fund, association or organisation set up for the purpose of providing financial cover for members when they retire from work. For this survey, information about superannuation scheme membership was collected if the respondent indicated that contributions had been made to a scheme. Contributions could either have been made by the respondent, the respondent's partner or the respondent's employer.

## Unemployed

Persons who were not employed during the reference week, and:

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and;
- were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

## Usual number of hours

The number of hours usually worked in a week in all jobs.

## Abbreviations

### ABBREVIATIONS

'000	thousand
ABS	Australian Bureau of Statistics
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASCED	Australian Standard Classification of Education
ASCO	Australian Standard Classification of Occupations
DVA	Australian Government Department of Veterans Affairs
LFS	Labour Force Survey
MPHS	Multipurpose Household Survey
MPS	Monthly Population Survey
OMIE	Owner manager of incorporated enterprise
OMUE	Owner manager of unincorporated enterprise
RSE	Relative standard error
SACC	Standard Australian Classification of Countries
SE	Standard error

## Populations (Appendix)

### APPENDIX Populations

#### DATA AVAILABLE ON REQUEST

The ABS has a range of data available on request from the Retirement and Retirement Intentions topic. This section lists the populations which are used in the publication. Full details of the data items are available on the ABS website in an Excel spreadsheet, under the Downloads section (B&I and R&RI 2016–17 Data Items List).

The population(s) for a particular data item refers to the persons in the survey to whom the data relates. Where alternative output categories are available for the same data item, these are shown and the data item name is followed by a bracketed numeral (e.g. [country of birth \(2\)](#)).

Note: The populations for this topic are numbered from 16–24A. Populations 1–15A relate to the Barriers and Incentives to Labour Force Participation topic (cat. no. 6239.0) alongside which this survey was run.

For more information about ABS data available on request, contact National Information and Referral Service in Canberra on 1300 135 070 or via email to <[client.services@abs.gov.au](mailto:client.services@abs.gov.au)> or contact Labour Markets Analytics Section by email to <[labour.statistics@abs.gov.au](mailto:labour.statistics@abs.gov.au)>

#### Population 16

All persons aged 45 years and over

#### Population 17

Persons aged 45 years and over who have worked, at some time, for two weeks or more

#### Population 18

Persons in the labour force aged 45 years and over

#### Population 19

Employed persons aged 45 years and over

#### Population 20

Persons aged 45 years and over who usually worked part-time hours in their main job

#### Population 21

Persons not in the labour force aged 45 years and over

#### Population 22

Persons aged 45 years and over who have retired from the labour force

#### **Population 23**

Persons aged 45 years and over who have not retired from the labour force

#### **Population 24**

Persons aged 45 years and over who intend to retire from the labour force

#### **Population 24A**

Persons in the labour force aged 45 years and over who intend to retire from the labour force

## **Quality Declaration - Summary**

### **QUALITY DECLARATION - SUMMARY**

#### **INSTITUTIONAL ENVIRONMENT**

For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

#### **RELEVANCE**

The Retirement and Retirement Intentions survey provides data about the retirement status and retirement intentions of persons aged 45 years and over who have, at some time, worked for two weeks or more. The data collected in the Retirement and Retirement Intentions topic provide information on retirement trends, the factors which influence decisions to retire, and the income arrangements that retirees and potential retirees have made to provide for their retirement. The data are cross-classified by a range of demographic characteristics such as age, sex and country of birth, as well as labour force characteristics.

Full details of the data items are available on the ABS website in an Excel spreadsheet, under the Downloads section (B&I and R&RI 2016–17 Data Items List).

#### **TIMELINESS**

The Retirement and Retirement Intentions survey is collected biennially, and was first conducted in 2004–05. The most recent Retirement and Retirement Intentions survey was conducted throughout Australia during the 2016–17 financial year. It was a component of the 2016–17 Multipurpose Household Survey (MPHS), collected as a supplement to the ABS Labour Force Survey (LFS).

#### **ACCURACY**

The initial sample for the MPHS 2016–17 consisted of approximately 26,000 private households. Of the 15,400 private households that remained in the survey after sample loss (e.g. households with LFS non-response, no residents in scope for the LFS, vacant or derelict dwellings and dwellings under construction), approximately 72% responded to the MPHS. For the Retirement and Retirement Intentions survey, the number of completed interviews obtained from these private households after taking into account scope, coverage and sub sampling exclusions was 8,200.

Estimates from the survey are subject to sampling and non-sampling errors.

The MPHS was designed primarily to provide estimates at the Australia level. Broad estimates are available for states and territories, though users should exercise caution when using estimates at this level because of the presence of high sampling errors.

To minimise the risk of identifying individuals in aggregate statistics, a technique is used to randomly adjust cell values. This technique is called perturbation. Perturbation involves small random adjustment of the statistics and is considered the most satisfactory technique for avoiding the release of information that could identify individual survey respondents while maximising the range of information that can be released. These adjustments have a negligible impact on the underlying pattern of the statistics. After perturbation, a given published cell will be consistent across all tables. However, adding up cell values to derive a total will not necessarily give the same result as published totals.

#### **COHERENCE**

For the 2012–13 survey, questions were included on Housing tenure, Previous full-time job details and Main source of current personal income. These were excluded from the 2014–15 survey.

For the 2014–15 survey, changes were also made to include the further age ranges of '65 - 69', '70 - 74', '75 - 79' and '80 and over' for questions on transitioning to retirement.

For the 2016–17 survey, enhancements were made to Previous job module, a new question asking "Did you have employees in the business" was added. Questions were also included on Housing tenure.

The statistics presented in this survey have been benchmarked to the Estimated Resident Population for December 2016, independently produced according to the scope of the survey. This ensures that the survey estimates conform to person benchmarks by state, section of state, age and sex. The statistics have been further benchmarked to labour force survey estimates averaged over the 12 month MPHS reference period. This ensures that survey estimates are also consistent with the estimated in-scope population by state, section of state, sex, age and labour force status.

#### **INTERPRETABILITY**

The Retirement and Retirement Intentions publication contains detailed Explanatory Notes, Technical Notes and a Glossary that provide information on the terminology, classifications and other technical aspects associated with these statistics.

The estimates are based on information collected over the financial year. Therefore, seasonally adjusted and trend estimates are not produced and seasonal weighting is not undertaken.

Further commentary is often available through articles and data published in other ABS products, including:

Australian Labour Market Statistics (cat. no. 6105.0).

Australian Social Trends (cat. no. 4102.0).

Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001).

Year Book, Australia (cat. no. 1301.0) - refer to the 'Labour' chapter.

#### **DATA ACCESS**

For the 2016–17 release, tables and associated RSEs are available in spreadsheet form on the ABS website.

Retirement and Retirement Intentions, Australia (cat. no. 6238.0) is released electronically via the ABS website as Datacubes in spreadsheet format. Additional data may be available on request (subject to data quality). Note that detailed data can be subject to high relative standard errors. Full details of data items for this survey are available from the Downloads tabs in Datacube: B&I and R&RI 2016-17 Data items list.

For users who wish to undertake a more detailed analysis of the data, the survey microdata will be released through the TableBuilder product. For more details, refer to the TableBuilder information, Microdata, Barriers and Incentives to Labour Force Participation, Retirement and Retirement Intentions, Australia (cat. no. 6238.0.55.001). For more information see About TableBuilder.

For more information about ABS data available on request, contact National Information and Referral Service in Canberra on 1300 135 070 or via email to <client.services@abs.gov.au> or contact Labour Markets Analytics Section by email to <labour.statistics@abs.gov.au>

## Data Cubes (I-Note) - Data Cubes

Table 7 updated: The data relating to the sources of income "Workers' Compensation" and "Dividends or Interest" were originally published in the wrong rows. These have been corrected in the current version (07/05/2020).

## Data Quality (Technical Note)

### TECHNICAL NOTE DATA QUALITY

#### INTRODUCTION

1 Since the estimates published in this publication are based on information obtained from occupants of a sample of households, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all households had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of households (or occupants) was included.

2 There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all households had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

3 Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

$$RSE\% = (SE/estimate) \times 100$$

4 RSEs for Retirement and Retirement Intentions estimates have been calculated using the Jackknife method of variance estimation. This process involves the calculation of 30 'replicate' estimates based on 30 different subsamples of the original sample. The variability of estimates obtained from these subsamples is used to estimate the sample variability surrounding the main estimate.

5 The Excel spreadsheets in the Downloads tab contain all the tables produced for this release and the calculated RSEs for each of the estimates. The RSEs for estimates other than medians have been calculated using the Jackknife method, and RSEs for the medians have been calculated using the Woodruff method.

6 In the tables in this publication, only estimates (numbers, percentages, means and medians) with RSEs less than 25% are considered sufficiently reliable for most purposes. However, estimates with larger RSEs have been included. Estimates with an RSE in the range 25% to 50% should be used with caution while estimates with RSEs greater than 50% are considered too unreliable for general use. All cells in the Excel spreadsheets with RSEs greater than 25% contain a comment indicating the size of the RSE. These cells can be identified by a red indicator in the corner of the cell. The comment appears when the mouse pointer hovers over the cell.

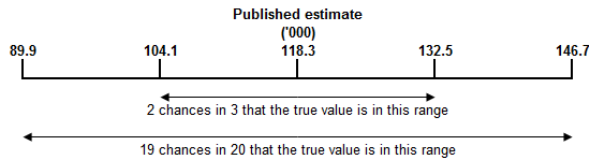
#### CALCULATION OF STANDARD ERROR AND RELATIVE STANDARD ERROR

7 RSEs are routinely presented as the measure of sampling error in this publication and related products. SEs can be calculated using the estimates (counts or means) and the corresponding RSEs.

8 An example of the calculation of the SE from an RSE follows. Datacube 3 shows that the estimated number of females aged 55–59 who retired from the labour force aged less than 55 years is 118,300 and the RSE for this estimate is 12.0%. The SE is:

$$\begin{aligned} SE \text{ of estimate} &= (RSE / 100) \times \text{estimate} \\ &= 0.12 \times 118,300 \\ &= 14,200 \text{ (rounded to the nearest 100)} \end{aligned}$$

9 Therefore, there are about two chances in three that the value that would have been produced if all households had been included in the survey will fall within the range 104,100 to 132,500 and about 19 chances in 20 that the value will fall within the range 89,900 to 146,700. This example is illustrated in the following diagram.



#### PROPORTIONS AND PERCENTAGES

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10 Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSEs of proportions not provided in the spreadsheets is given below. This formula is only valid when x is a subset of y.

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

11 Considering Datacube 3, of the 1,943,800 females who were retired from labour force, 898,300 or 46.2% were aged less than 55 years at retirement. The RSE of 898,300 is 3.9% and the RSE for 1,943,800 is 2.0%. Applying the above formula, the RSE for the proportion of females who retired aged less than 55 years is:

$$RSE = \sqrt{(3.9)^2 - (2.0)^2} = 3.3\%$$

12 Therefore, the SE for the proportion of females who retired from the labour force aged less than 55 years is 1.5 percentage points (= (46.2/100) x 3.3). Therefore, there are about two chances in three that the proportion of females who retired from the labour force aged less than 55 years is between 44.7% and 47.7%, and 19 chances in 20 that the proportion is within the range 43.2% to 49.2%.

#### SUMS OR DIFFERENCES BETWEEN ESTIMATES

13 Published estimates may also be used to calculate the sum of, or difference between, two survey estimates (of numbers, means or percentages) where these are not provided in the spreadsheets. Such estimates are also subject to sampling error.

14 The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x - y) = \sqrt{[RSE(x)]^2 + [RSE(y)]^2}$$

**15** The sampling error of the sum of two estimates is calculated in a similar way. An approximate SE of the sum of two estimates (x+y) may be calculated by the following formula:

$$SE(x + y) = \sqrt{[RSE(x)]^2 + [RSE(y)]^2}$$

**16** An example follows. From paragraph 8 the estimated number of females aged 55–59 who retired from the labour force aged less than 55 years is 118,300 and the SE is 14,200. From Datacube 3, the estimate of females aged 60–64 who retired from the labour force aged less than 55 years is 124,700, the RSE is 7.9% and the SE is 9,900 (rounded to nearest 100). The estimate of females aged 55–64 who retired from the labour force aged less than 55 years is:

$$118,300 + 124,700 = 243,000$$

**17** The SE of the estimate of females aged 55–64 who retired from the labour force aged less than 55 years is:

$$SE = \sqrt{(14,200)^2 + (9,900)^2} = 17,300$$

**18** Therefore, there are about two chances in three that the value that would have been produced if all households had been included in the survey will fall within the range 225,700 to 260,300 and about 19 chances in 20 that the value will fall within the range 208,400 to 277,600.

**19** While these formulae will only be exact for sums of, or differences between, separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all sums or differences likely to be of interest in this publication.

## SIGNIFICANCE TESTING

**20** A statistical test for any comparisons between estimates can be performed to determine whether it is likely that there is a significant difference between two corresponding population characteristics. The standard error of the difference between two corresponding estimates (x and y) can be calculated using the formula in paragraph 10. This standard error is then used to calculate the following test statistic:

$$\left( \frac{x - y}{SE(x - y)} \right)$$

**21** If the value of this test statistic is greater than 1.96 then there is evidence, with a 95% level of confidence, of a statistically significant difference in the two populations with respect to that characteristic. Otherwise, it cannot be stated with confidence that there is a difference between the populations with respect to that characteristic.

**22** The imprecision due sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and recording by interviewers, and errors made in coding and processing data. Inaccuracies of this kind are referred to as non-sampling error, and they occur in any enumeration, whether it be a full count or sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient operating procedures.